

REMARKS

The present Amendment amends claims 1, 5, 6 and 9-16, leaves claims 2-4, 7 and 8 unchanged and adds new claims 17 and 18. Therefore, the present application has pending claims 1-18.

Claims 12 and 14 stand rejected under 35 USC §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as their invention. Various amendments throughout claims 12 and 14 to bring them into conformity with the requirements of 35 USC §112, second paragraph. Therefore, Applicants submit that this rejection is overcome and should be withdrawn.

Specifically, amendments were made to claims 12 and 14 to overcome the objections noted by the Examiner in paragraph 4 of the Office Action.

The Examiner's cooperation is respectfully requested to contact Applicants' Attorney by telephone should any further indefinite matter be discovered so that appropriate amendments may be made.

Claims 1-16 stand rejected under 35 USC §102(e) as being anticipated by Garcia-Luna-Aceves (U.S. Patent Application Publication No. 2001/0056416 A1). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 1-16 are not taught or suggested by Garcia-Luna-Aceves whether taken individually or in combination with any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to each of claims 1-16 so as to more clearly describe features of the present invention not taught or suggested by any of

the references of record whether taken individually or in combination with each other. Particularly, amendments were made to the claims so as to more clearly describe features of the present invention not taught or suggested by Garcia-Luna-Aceves.

Particularly, the claims were amended to more clearly recite that the present invention is directed to a storage resource operation managing method and server.

According to the present invention the storage resource managing method is operated in a storage network arranged by a node for transmitting an access request via a network to a storage and by a storage group constituted by at least one storage resource which receives the access request so as to execute a content of the access request. The storage resource operation managing method according to the present invention includes acquiring at least one of a logical distance and a geographical distance from at least one of the node and the storage resources contained in the storage group, and the storage resources contained in the storage group wherein the logical distance is generated based on installation information regarding installation of each of the node and the storage resource and wherein the geographical distance is generated based on information of a physical location of each of the node and the storage resources, acquiring from the node a requirement range with respect to at least one of the logical distance and the geographical distance and selecting at least one storage resource for executing the access request, issued by the node, from the storage group, while at least one of the requirement range with respect to the

logical distance the requirement range with respect to the geographical distance is set as a selecting condition.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, the above described features of the present invention now more clearly recited in the claims are not taught or suggested by Garcia-Luna-Aceves whether taken individually or in combination with any of the other references of record.

Garcia-Luna-Aceves teaches a method and system for determining which of a number of available information object repositories should service a client, wherein the information object repositories maintains the information object or service requested by the client, and bringing the information object or service to the information object repository that should service the client. Garcia-Luna-Aceves teaches that an address of an information object repository that should service a client request for an information object is returned in response to a request therefore. As per Garcia-Luna-Aceves the address of the information object repository that is returned is selected according to the specified performance metrics that may include one or more of an average delay from the information object repository to the client, average processing delays at the information object repository, reliability of a path from the information object repository to the client, available bandwidth in the path, and loads on the information object repository.

Garcia-Luna-Aceves teaches in another embodiment that a communication protocol including one or more messages passed between

web routers over a reliable transmission protocol is used for inter-web router communication. As taught by Garcia-Luna-Aceves these messages include information that allows the web routers to dynamically update mapping of client addresses or address ranges to information object repository addresses based on specified performance metrics. Garcia-Luna-Aceves specifically teaches in paragraph [0046] that:

“the messages may report updated distances from the information object repository addresses to the client addresses or address ranges, these ranges being based on the specified performance metrics; and/or updated distances from the information object repository address to the information object repository hosting an information object or service, these distances being based on the specified performance metrics”.

However, it is clear from Garcia-Luna-Aceves that the updated distances being referred to may be somewhat related to the logical distance recited in the claims but are surely not related to a geographical distance as recited in the claims. Garcia-Luna-Aceves states that the (updated) distances being referred to are generated based upon the specified performance metrics. Garcia-Luna-Aceves specifically teaches in paragraph [0046] that:

“the specified performance metrics may include one or more of an average delay from the information object repositories to the client, an average processing delay at the information object repositories, reliability of the path from the information object repositories to the clients, available bandwidth in such paths, and loads on the information object repositories. The distance information between addresses and information object repositories may be computed according a shortest first algorithm, for example, according to routing information provided by inter-network routers. Such routing information may include inter-domain and intra-domain routing information”.

Thus, at no point is there any teaching or suggestion in Garcia-Luna-Aceves that the logical distance is generated based upon installation information of each of the node and storage resources and that the geographical distance is generated based upon information of a physical location of the node and storage resources as in the present invention as recited in the claims. Since Garcia-Luna-Aceves is quite clear as to how the distances are calculated, namely that they are calculated based upon specified performance metrics or shortest path first algorithms, there is absolutely no teaching or suggestion therein of a use of installation information and information of the actual physical location of each of the node and storage resources as in the present invention as recited in the claims.

Thus, Garcia-Luna-Aceves fails to teach or suggest acquiring at least one of a logical distance and a geographical distance from at least one of the node and the storage resources contained in the storage group, and the storage resources contained in the storage group as recited in the claims.

Further, Garcia-Luna-Aceves fails to teach or suggest that the logical distance is generated based on installation information including information regarding installation of each of the node and the storage resources as recited in the claims.

Still further, Garcia-Luna-Aceves fails to teach or suggest that the geographical distance is generated based on information of a physical location of each of the node and the storage resources as recited in the claims.

Therefore, Garcia-Luna-Aceves fails to teach or suggest the features of the present invention as now more clearly recited in the claims. Accordingly,

reconsideration and withdrawal of the 35 USC §102(e) rejection of claims 1-16 as being anticipated by Garcia-Luna-Aceves is respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the reference utilized in the rejection of claims 1-16.

As indicated above, the present Amendment adds new claims 17 and 18. New claims 17 and 18 each depend from claim 1 and therefore recite many of the same features recited in claim 1 shown above not to be taught or suggested by Garcia-Luna-Aceves whether taken individually or in combination with any of the references of record. Therefore, the same arguments presented above with respect to the use of Garcia-Luna-Aceves to reject claim 1 apply as well to the potential use of Garcia-Luna-Aceves to reject 17 and 18.

In view of the foregoing amendments and remarks, applicants submit that claims 1-18 are in condition for allowance. Accordingly, early allowance of claims 1-18 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (500.41164X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.



Carl I. Brundidge
Registration No. 29,621

CIB/jdc
(703) 684-1120